

REMARKS

Favorable reconsideration of this application, in view of the above amendments and in light of the following remarks and discussion, is respectfully requested.

Claims 1-17 are currently pending in the application; Claims 1-17 having been amended by way of the present response.

In the outstanding Office Action, the disclosure was objected to because of informalities. In response, Applicants have amended the specification in accordance with the Examiner's helpful suggestions. Specifically, Applicants have amended page 17, line 5, to state "steering" in place of the previous incorrect statement of "staring," and page 24, line 13, to state "a lower end portion" in place of the previous incorrect statement of "an lower portion." Thus, for at least these reasons, Applicants respectfully request that the objection to the specification be withdrawn.

In the Office Action, Claim 1 was rejected under 35 U.S.C. § 112, first paragraph. In response, Applicants have amended the claim in a non-narrowing manner to overcome the rejection and to further the prosecution of the application, and not for any reason related to the patentability of the claims in view of one or more references of record in the application. Specifically, Applicants have amended independent Claim 1 to recite "rotating the selected image according to a rotation of said display screen" in place of the previous recitation of "rotating arbitrary one of said image information previously selected in parallel with said display surface." Applicants respectfully assert that support for these features is provided, in part, by page 46, lines 15-24, of the originally filed disclosure, as well as original Figure 19. Thus, for at least these reasons, Applicants respectfully request that the rejection of the claims under 35 U.S.C. § 112, first paragraph, be withdrawn.

In the Office Action, Claims 1-3, 5, 7-9, and 11 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,492,974 to Nobuchi et al. (Nobuchi).

Claims 13, 14, and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nobuchi. Claims 4, 6, 10, 12, 15, and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nobuchi in view of U.S. Patent No. 6,380,921 to Nakamura. Applicants respectfully assert that the rejections of the claims have been overcome for the following reasons.

As stated above, Claims 1-17 have been amended. Applicants respectfully assert that support for the changes to the claims is self-evident from the originally filed disclosure, including the original claims, and that therefore no new matter has been added.

The present invention is directed to information processing apparatuses, information processing methods, and mediums for storing programs which cause information processing apparatuses to execute processing. Independent Claims 1 and 3 each recite posture detecting means for detecting an angular component of a change of posture of a display screen. Displaying direction control means display an image, and control a direction of display of the images by rotating the image according to a rotation of the display screen determined by the posture detecting means. Independent Claims 7, 9, 13, and 14 each recite a detection processing step of detecting an angular component of a change of posture of a display screen. A displaying direction control processing step controls a direction of display of an image by rotating the image according to a rotation of the display screen determined by the detection processing step.

Nobuchi is directed to a small-sized portable information processing apparatus. As shown in Figures 3(a)-(b) and 4(a)-(b), for example, of Nobuchi, a liquid crystal display 3 is connected to an apparatus body including a keyboard 2 by means of two pivot shafts 5a and 5b of a hinge member 5.¹ A switching mechanism 10 is rigidly attached to a side of the

¹ Column 4, lines 55-67.

liquid crystal display 3.² While the liquid crystal display 3 is turned by substantially 360 degrees with respect to the apparatus body from the closed position, the respective pivot shafts 5a and 5b are turned by 180 degrees, respectively, and the switch is turned on. When the liquid crystal display 3 is returned to its original position, the switch is turned off.³

However, Applicants respectfully assert that the switching mechanism 10 of Nobuchi does not detect an angular component of a change of posture of a display screen. The switching mechanism 10 is turned either on or off in response to positions of the liquid crystal display 3. Further, Applicants respectfully assert that a posture of the liquid crystal display screen 3 of Nobuchi can be changed without activating the switching mechanism 10 (e.g., by positioning the apparatus shown in the position indicated in Figure 8 of Nobuchi in any orientation). Thus, for at least these reasons, Applicants respectfully request that Nobuchi does not teach or suggest the claimed features of a means or step detecting an angular component of a change of posture of a display screen, and therefore also does not teach or suggest the claimed features of controlling a direction of display of an image by rotating the image according to a rotation of the display screen determined by the means or step, as recited in independent Claims 1, 3, 7, 9, 13, and 14.

Specifically, independent Claim 1 recites “posture detecting means for detecting an angular component of a change of posture of the display screen . . . and displaying direction control means for displaying a plurality of images on said display screen, and for controlling a direction of display of a selected image from the plurality of images by rotating the selected image according to a rotation of said display screen determined by said posture detecting means.” Independent Claim 3 recites “posture detecting means for detecting an angular component of a change of posture of the display screen . . . and displaying direction control means for displaying an image on said display screen, and for controlling a direction of

² Column 5, lines 42-56.

³ Column 6, lines 1-17.

display of the image by rotating said image according to a rotation of the display screen determined by said posture detecting means.” Independent Claim 7 recites “a detection processing step of detecting an angular component of a change of posture of the display screen . . . and a displaying direction control processing step of controlling a direction of display of a selected image from the plurality of images by rotating the selected image according to a rotation of said display screen determined by said detection processing step.” Independent Claim 9 recites “a detection processing step of detecting an angular component of a change of posture of the display screen . . . and a displaying direction control processing step of controlling a direction of display of the image by rotating said image according to a rotation of the display screen determined by said detection processing step.” Independent Claim 13 recites “a detection processing step of detecting an angular component of a change of posture of the display screen . . . and a displaying direction control processing step of controlling a direction of display of a selected image from the plurality of images by rotating said selected image according to a rotation of said display screen determined by said detection processing step.” Independent Claim 14 recites “a detection processing step of detecting an angular component of a change of posture of the display screen . . . and a displaying direction control processing step of controlling a direction of display of the image by rotating said image according to rotation of the display screen determined by the detection processing step.”

Thus, for at least these reasons, Applicants respectfully request that the rejection of independent Claims 1, 3, 7, and 9 under 35 U.S.C. § 102(e) be withdrawn and the independent claims allowed.

Regarding independent Claims 13 and 14, the Office Action relies on Nakamura in an attempt to remedy the deficiencies of Nobuchi. However, Applicants respectfully assert that Nakamura does not teach or suggest, and the Office Action does not rely on Nakamura to

teach or suggest, the claimed features of a means or step detecting an angular component of a change of posture of a display screen, and therefore also does not teach or suggest the claimed features of controlling a direction of display of an image by rotating the image according to a rotation of the display screen determined by the means or step, as recited in the independent claims.

Thus, for the above reasons, Applicants respectfully assert that neither Nobuchi nor Nakamura, whether taken alone or in combination, teach or suggest the claimed features recited in independent Claims 13 and 14. Therefore, Applicants respectfully request that the rejection of independent Claims 13 and 14 under 35 U.S.C. § 103(a) be withdrawn and the independent claims allowed.

Dependent Claims 2, 5, and 6 depend from independent Claim 1. Dependent Claim 4 depends from independent Claim 3. Dependent Claims 8, 11, and 12 depend from independent Claim 7. Dependent Claim 10 depends from independent Claim 9. Dependent Claim 15 depends from independent Claim 14. Dependent Claims 16 and 17 depend from independent Claim 13. Applicants respectfully assert that the dependent claims are allowable for at least the same reasons as the independent claims from which they depend, as well as for their own features. Thus, for at least these reasons, Applicants respectfully request that the rejections of dependent Claims 2, 4-6, 8, 10-12, and 15-17 under 35 U.S.C. §§ 102(e) and 103(a) be withdrawn and the dependent claims allowed.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-17 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact the undersigned representative at the below listed telephone number.



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Respectfully submitted,

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A handwritten signature in dark ink, appearing to read "C. Ward", written in a cursive style.

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IN THE SPECIFICATION

The specification has been amended as follows:

Page 17, beginning with line 1, please delete the paragraph and replace with the following text:

Actually, as the personal computer 1 is powered on by the power switch 12, the CPU 30 reads the OS stored on the hard disk within the hard disk drive 35, and transfers the read OS to the RAM 32 sequentially through the external bus 34 and the internal bus 31 for storage, thereby [staring] steering the OS in an executable state.

Page 24, beginning with line 12, please delete the paragraph and replace with the following text:

On the multi-window screen 83 thus displayed, a task bar 88 is displayed in [an] a lower end portion of the desktop screen 84. The task bar 88 displays the names of application programs or files (My computer, Control Panel, and so on) corresponding to first to third windows 85 to 87, which are currently on the screen, together with a variety of icons.

IN THE CLAIMS

The claims have been amended as follows:

1. (Amended) An information processing apparatus comprising:

a display screen;

posture detecting means for detecting [the] an angular component of a change of [the] posture of [a] the display [surface] screen; and

[display orientation] displaying direction control means for displaying a plurality of [types of image information] images on said display [surface] screen, and for controlling [the display orientation for the] a direction of display of a selected [arbitrary] image [information] from the plurality of images by rotating [arbitrary one of said image information previously selected in parallel with] the selected image according to a rotation of said display [surface on the basis of the result of detection on the angular component derived from] screen determined by said posture detecting means.

2. (Amended) The information processing apparatus according to claim 1, wherein;

said [display orientation] displaying direction control means displays a plurality of [types of said image information which are a plurality of] windows as the plurality of images, and controls [said display orientation for said previously selected arbitrary image information by rotating said previously selected arbitrary one of said windows in parallel with said display surface on the basis of said result of detection derived from said posture detecting means] the direction of display of a selected window from the plurality of windows according to the rotation of the display screen.

3. (Amended) An information processing apparatus comprising:

a display screen;

posture detecting means for detecting [the] an angular component of a change of [the] posture of [a] the display [surface] screen; and

[display orientation] displaying direction control means for displaying an image [information] on said display [surface] screen, and for controlling [the display orientation for] a direction of display of the image [information] by rotating said image [information in parallel with said display surface on the basis of the result of detection on the angular component derived from] according to a rotation of the display screen determined by said posture detecting means; wherein

said [display orientation] displaying direction control means controls [said display orientation for] the direction of display of said image [information] by rotating said image [information in parallel with said display surface on the basis of said result of detection derived from said posture detecting means when said angular component has changed beyond a previously set predetermined angular component range] according to the rotation of the display screen beyond a predetermined range.

4. (Amended) The information processing apparatus according to claim 3, wherein; [after said angular component has rotated beyond said angular component range,] said [display orientation] displaying direction control means [further] controls [said display orientation for] the direction of display of said image [information] by rotating said image [information in parallel with said display surface on the basis of said result of detection derived from said posture detecting means, in the state that said angular component rotates beyond said angular component range even after the lapse of a previously set predetermined delay time] when the display screen remains rotated beyond the predetermined range after a predetermined time.

5. (Amended) The information processing apparatus according to claim 1, wherein; said [display orientation] displaying direction control means [further] controls [said display orientation for] the direction of display of said selected image [information] by rotating said selected image [information in parallel with said display surface on the basis of

said result of detection derived from said posture detecting means when said angular component changes beyond a previously set predetermined angular component range] according to the rotation of the display screen beyond a predetermined range.

6. (Amended) The information processing apparatus according to claim 5, wherein;
[after said angular component has rotated beyond said angular component range,] said [display orientation] displaying direction control means [further] controls [said display orientation for] the direction of display of said selected image [information] by rotating said selected image [information in parallel with said display surface on the basis of said result of detection derived from said posture detecting means, in the state that said angular component rotates beyond said angular component range even after the lapse of a previously set predetermined delay time] when the display screen remains rotated beyond the predetermined range after a predetermined time.

7. (Amended) An information processing method comprising:
a display processing step of displaying [image information] a plurality of images on a display [surface] screen;

a detection processing step of detecting [the] an angular component of a change of [the] posture of the display [surface] screen; and

a [display orientation] displaying direction control processing step of controlling [the display orientation for the] a direction of display of a selected [arbitrary] image [information] from the plurality of images by rotating [arbitrary one of said image information previously selected in parallel with] the selected image according to a rotation of said display [surface on the basis of the result of detection on the angular component derived from] screen determined by said detection processing step.

8. (Amended) The information processing method according to claim 7, wherein;

said display processing step displays a plurality of [types of said image information which are a plurality of] windows as the plurality of images, and controls [said display orientation for said previously selected arbitrary image information by rotating said previously selected arbitrary one of said windows in parallel with said display surface on the basis of said result of detection derived from said detection processing step] the direction of display of a selected window from the plurality of windows according to the rotation of the display screen.

9. (Amended) An information processing method comprising:

a display processing step of displaying an image [information] on a display [surface] screen;

a detection processing step of detecting [the] an angular component of a change of [the] posture of the display [surface] screen; and

a [display orientation] displaying direction control processing step of controlling [the display orientation for] a direction of display of the image [information] by rotating said image [information in parallel with said display surface on the basis of the result of detection on the angular component derived from] according to a rotation of the display screen determined by said detection processing step; wherein

said [display orientation] displaying direction control processing step [further] rotates said image [information in parallel with said display surface on the basis of said result of detection derived from said detection processing step when said angular component has changed beyond a previously set predetermined angular component range] according to the rotation of the display screen beyond a predetermined range.

10. (Amended) The information processing method according to claim 9, wherein;

[after said angular component has rotated beyond said angular component range,] said [display orientation] displaying direction control processing step [further] rotates said image

[information in parallel with said display surface on the basis of said result of detection derived from said detection processing step, in the state that said angular component rotates beyond said angular component range even after the lapse of a previously set predetermined delay time] when the display screen remains rotated beyond the predetermined range after a predetermined time.

11. (Amended) The information processing method according to claim 7, wherein; said [display orientation] displaying direction control processing step [further] rotates said selected image [information in parallel with said display surface on the basis of said result of detection derived from said detection processing step when said angular component has changed beyond a previously set predetermined angular component range] according to the rotation of the display screen beyond a predetermined range.

12. (Amended) The information processing method according to claim 11, wherein; [after said angular component has rotated beyond said angular component range,] said [display orientation] displaying direction control processing step [further] rotates said selected image [information in parallel with said display surface on the basis of said result of detection derived from said detection processing step, in the state that said angular component rotates beyond said angular component range even after the lapse of a previously set predetermined delay time] when the display screen remains rotated beyond the predetermined range after a predetermined time.

13. (Amended) A medium for storing a program which causes an information processing apparatus to execute a processing, the processing comprising:

a display processing step of displaying [image information] a plurality of images on a display [surface] screen;

a detection processing step of detecting [the] an angular component of a change of [the] posture of the display [surface] screen; and

a [display orientation] displaying direction control processing step of controlling [the display orientation for the] a direction of display of a selected [arbitrary] image [information] from the plurality of images by rotating [arbitrary one of] said selected image [information previously selected in parallel with] according to a rotation of said display [surface on the basis of the result of detection on the angular component derived from] screen determined by said detection processing step.

14. (Amended) A medium for storing a program which causes an information processing apparatus to execute a processing, the processing comprising:

a display processing step of displaying an image [information] on a display [surface] screen;

a detection processing step of detecting [the] an angular component of a change of [the] posture of the display [surface] screen; and

a [display orientation] displaying direction control processing step of controlling [the display orientation for] a direction of display of the image [information] by rotating said image [information in parallel with said display surface on the basis of the result of detection on the angular component derived from said detection processing step] according to rotation of the display screen determined by the detection processing step; wherein

said [display orientation] displaying direction control processing step [further] rotates said image [information in parallel with said display surface on the basis of said result of detection derived from said detection processing step when said angular component has changed beyond a previously set predetermined angular component range] according to the rotation of the display screen beyond a predetermined range.

15. (Amended) The medium for storing the program according to claim 14, wherein;
[after said angular component has rotated beyond said angular component range,] said [display orientation] displaying direction control processing step [further] rotates said image

[information in parallel with said display surface on the basis of said result of detection derived from said detection processing step, in the state that said angular component rotates beyond said angular component range even after the lapse of a previously set predetermined delay time] when the display screen remains rotated beyond the predetermined range after a predetermined time.

16. (Amended) The medium for storing the program according to claim 13, wherein; said [display orientation] displaying direction control processing step [further] rotates said selected image [information in parallel with said display surface on the basis of said result of detection derived from said detection processing step when said angular component has changed beyond a previously set predetermined angular component range] according to the rotation of the display screen beyond a predetermined range.

17. (Amended) The medium for storing the program according to claim 16, wherein; [after said angular component has rotated beyond said angular component range,] said [display orientation] displaying direction control processing step [further] rotates said selected image [information in parallel with said display surface on the basis of said result of detection derived from said detection processing step, in the state that said angular component rotates beyond said angular component range even after the lapse of a previously set predetermined delay time] when the display screen remains rotated beyond the predetermined range after a predetermined time.